

REMARKS

Claims 1 to 3, 6, 8 to 12 and 20 were rejected under 35 U.S.C. §112, first paragraph, as failing to comply with the written description requirement. The drawings were objected to under 37 C.F.R. 1.83(a).

Claims 13 and 15 were rejected under 35 U.S.C. §102(b) as being anticipated by Japanese Patent 56-62464 (JP '464). Claims 1 to 3 and 7 to 12 were rejected under §103(a) as being unpatentable over Baker, U.S. Patent No. 4,936,811, in view of Devers, U.S. Patent No. 6,672,596. Claims 16 to 19 were rejected under 35 U.S.C. §103(a) as being unpatentable over JP '464 in view of Devers '596.

Claim 14 was objected to as being dependent upon a rejected base claim, but would be allowed if rewritten in independent form. Claim 6 would be allowable if rewritten or amended to overcome the rejection under 35 U.S.C. §112, first paragraph.

Claim 13 has been amended and claim 14 canceled without prejudice. Claim 21 has been added and corresponds to previous claim 20.

Reconsideration of the application is respectfully requested.

Rejections under 35 U.S.C. §112, first paragraph

Claims 1 to 3, 6, 8 to 12 and 20 were rejected under 35 U.S.C. §112, first paragraph, as failing to comply with the written description requirement.

Support in the specification for claims 1 to 3, 6 and 8 to 12 is found in paragraph [0031] which specifically states “In the exemplary embodiments shown in the figures, compensating pieces 6 *and* 6’ each include a radial supporting web 11 that is used for transferring the clamping force from clamp 7 to connecting collar 5.” (Emphasis added). It is thus explicitly clear from the specification that the clamp 7 shown in Fig. 1 is used to clamp the Fig. 5 and 7 embodiments with compensating pieces 6’, and withdrawal of the rejection is respectfully submitted. (It is also respectfully submitted that it would be clear to one of skill in the art that the Fig. 5 and Fig. 7 embodiments would be clamped.)

Drawing Objections

The drawings were objected to under 37 C.F.R. 1.83(a). The clamp 7 is shown in Fig. 1 and is clearly cited in the specification as also being used to clamp the Fig. 5 and 7 embodiments, and thus every feature of the claims is shown in the drawings.

Withdrawal of the objection is respectfully requested.

Rejections under 35 U.S.C. §102

Claims 13 and 15 were rejected under 35 U.S.C. §102(b) as being anticipated by Japanese Patent 56-62464 (JP '464).

Claim 13 has been amended to recite the limitations of allowable claim 14, and withdrawal of the rejections to the claims under 35 U.S.C. §102(b) is respectfully requested, as is the rejection to dependent claims 16 to 19 under 35 U.S.C. §103(a) as being unpatentable over JP '464 in view of Devers.

Rejections under 35 U.S.C. §103

Claims 1 to 3 and 7 to 12 were rejected under §103(a) as being unpatentable over Baker '811 in view of Devers '596.

Baker discloses segmented band sections 30 that are longitudinally aligned over the sleeve 15 and housing 16 such that the tongues 34 and grooves 36 intermesh to form the band 22. The tongue and groove design of the band 22 permits the circumferential movement of the band 22 thereby isolating the clamp from having excessive loads applied thereto by movement of the joint 10.

Devers discloses a seal adaptor comprising an annular body 41 having a specifically configured inner surface 42 that conforms to the shape of the non-uniform outer surface 36. The seal adaptor assembly includes wall segments 42a-1 that define a plurality of pockets 43. Each of these pockets is filled with a general trapezoidally shaped cup-like insert. Each insert 44 is selected to have a rigidity greater than that of the material of the annular body 41 of the seal adaptor assembly 40.

Devers further discloses that the seal adaptor assembly 40 can be assembled by a method as set-forth herein by virtue of having enough pliability to be pulled over the end 12a of the housing 12 until the specifically configured inner surface 42 thereof is located to conform to the

non-uniform surface 36 of the housing 12. The inserts 44 can be assembled either prior to fitting of the seal adaptor assembly 40 on the housing 12 or thereafter. If preassembled the inserts can be premolded into the pockets, if post assembled the inserts can be pressed or snapped into the pockets after the seal adaptor assembly is connected to the housing.

The present invention provides an axle boot for joint sealing, comprising:

a joint housing including an external contour having a plurality of radial recesses;

a substantially axisymmetric bellows including an integral connecting collar formed as a single piece, the connecting collar including a plurality of indentations projecting radially inward, each indentation adapted to one of the radial recesses;

a plurality of compensating pieces connected to one another by a plurality of ring sections to form a single piece component surrounding an outer circumference of the connecting collar, the single piece component having a cylindrical outer circumferential surface, wherein at least one of the ring sections is elastically deformable sufficient to enable the single piece component to expand to a circumference larger than the outer circumference of the connecting collar; and

a circumferential clamp surrounding and contacting the single piece component.

As admitted by the Office Action, Baker does not show “wherein at least one of the ring sections is elastically deformable sufficient to enable the single piece component to expand to a circumference larger than the outer circumference of the connecting collar.”

In fact, a main purpose of Baker is to avoid such elasticity: “since the segments [sections 30] are *individually* free to move into the axially concave outer depression of the joint, the clamping force is effectively transmitted to the boot itself.” Column 2, lines 64 to 68 (emphasis added). Also, Baker specifically views the elastomeric deformable solutions discussed at col. 1, line 41 to col. 2, lines 35 as disadvantageous.

There is absolutely no reason or teaching or motivation in Devers or any other prior art to modify Baker to provide “at least one of the ring sections [being] elastically deformable sufficient to enable the single piece component to expand to a circumference larger than the outer circumference of the connecting collar” as the entire purpose of Baker is to permit the sections 30 to be individually free to move with respect to one another. This is also clear from claim 1 of Baker which “a plurality of *individual and separate* band sections.”

It is respectfully submitted that a fair reading of both Baker and Devers shows that there is absolutely no reason one of skill in the art would have connected the individual and separate pieces of Baker in an elastically deformable manner.

Moreover, Baker desires that the tongue and groove design permit "circumferential movement of the band 22." See column 4, lines 38 to 40. To have provided elastic deformability in place of the tongue and groove design would have made such circumferential movement difficult or impossible, as the elastic material would bulge.

Withdrawal of the rejections to claim 1 and its dependent claims under 35 U.S.C. §103(a) is respectfully requested.

New Claim 21

New claim 21 corresponds to old claim 20, which was not rejected under the prior art.

CONCLUSION

The present application is respectfully submitted as being in condition for allowance and applicants respectfully request such action.

Respectfully submitted,

DAVIDSON, DAVIDSON & KAPPEL, LLC

By: 
William C. Gehris, Reg. No. 38,156

Davidson, Davidson & Kappel, LLC
485 Seventh Avenue - 14th Floor
New York, New York 10018
(212) 736-1940